

1.7 Practice Test

Date _____ Period _____

Solve each inequality and graph its solution.

1) $-11 < m - 7$



$$\begin{aligned} -11 + 7 &< m - 7 + 7 \\ -4 &< m \end{aligned}$$

2) $30 \leq -3b$



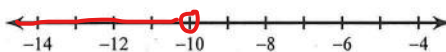
$$\begin{aligned} 30 \div -3 &\geq -3 \div -3 \\ -10 &\geq b \end{aligned}$$

3) $\frac{x}{5} - 4 \leq -6$



$$\begin{aligned} \frac{x}{5} - 4 + 4 &\leq -6 + 4 \\ \frac{x}{5} &\leq -2 \\ \frac{x}{5} \cdot 5 &\leq -2 \cdot 5 \\ x &\leq -10 \end{aligned}$$

4) $\frac{-2 + x}{2} < -6$



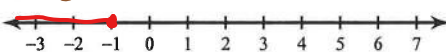
$$\begin{aligned} \frac{-2 + x}{2} &< -6 \cdot 2 \\ -2 + x &< -12 \\ x &< -12 + 2 \\ x &< -10 \end{aligned}$$

5) $4 < -2m - 2m$



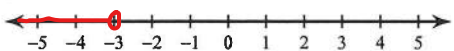
$$\begin{aligned} 4 \div -4 &< -4 \div -4 \\ -1 &< m \end{aligned}$$

6) $2 - 1n \geq 1 - 2n$



$$\begin{aligned} 2 - 1n + 1n &\geq 1 - 2n + 1n \\ 2 - 1 &\geq 1 - 1n \\ 1 \div -1 &\leq -1 \div -1 \\ -1 &\leq n \end{aligned}$$

7) $54 > 3(2 - 4b) - 4b$



$$\begin{aligned} 54 &> 6 - 12b - 4b \\ 48 &> -16b \\ -3 &< b \end{aligned}$$

8) $-2x + 5 \leq 2(1 + x) - x$



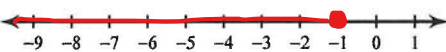
$$\begin{aligned} -2x - 1x + 5 &\leq 2 + 2x - 1x \\ -3x + 5 &\leq 2 - 5 \\ -3x &\leq -3 \\ x &\geq 1 \end{aligned}$$

9) $-2(2 + 2b) - 4(-4 + 2b) > -12$



$$\begin{aligned} -12b &> -12 \\ -12 \div -12 &< 1 \end{aligned}$$

10) $k + 4 + 4 \leq 4(k + 3) - 1(-1 - 2k)$



$$\begin{aligned} k + 8 &\leq 4k + 12 + 1 + 2k \\ k - 1k + 8 &\leq 6k - 1k + 13 \\ 8 - 13 &\leq 5k + 13 - 13 \\ -5 &\leq 5k \\ -1 &\leq k \end{aligned}$$